

S. W. Babbitt,

Fluting Mach.

No. 113242,

Patented Apr. 4, 1871.

Fig. 1.

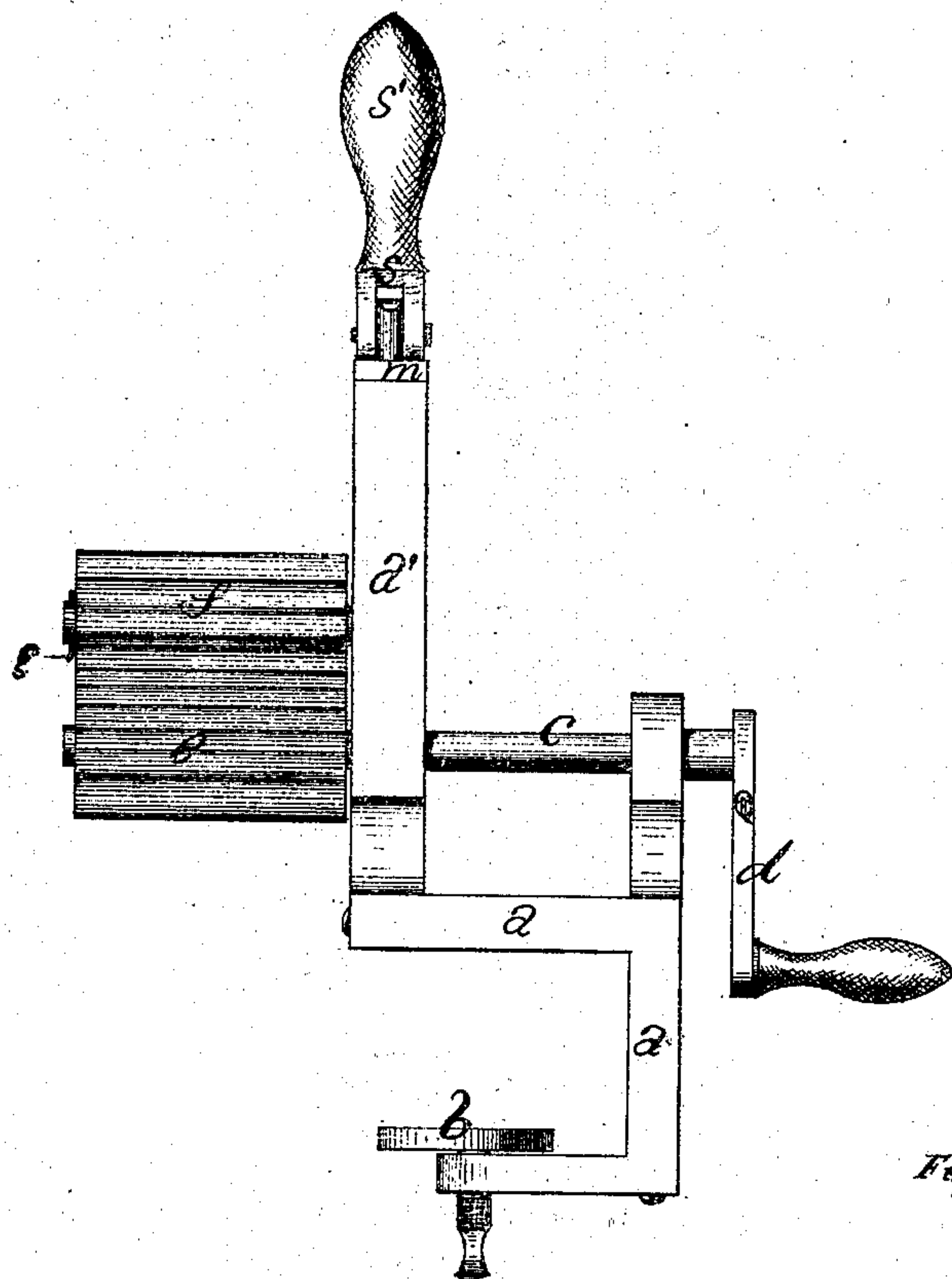


Fig. 2.

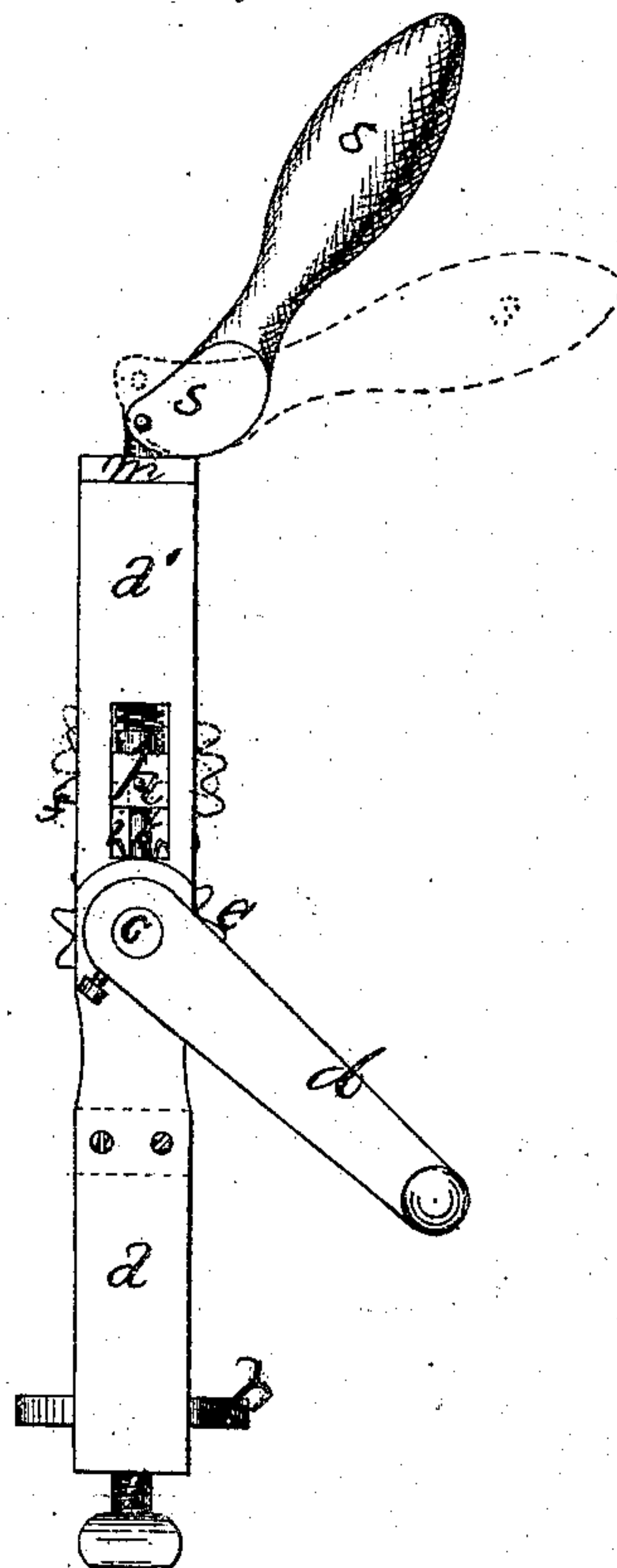
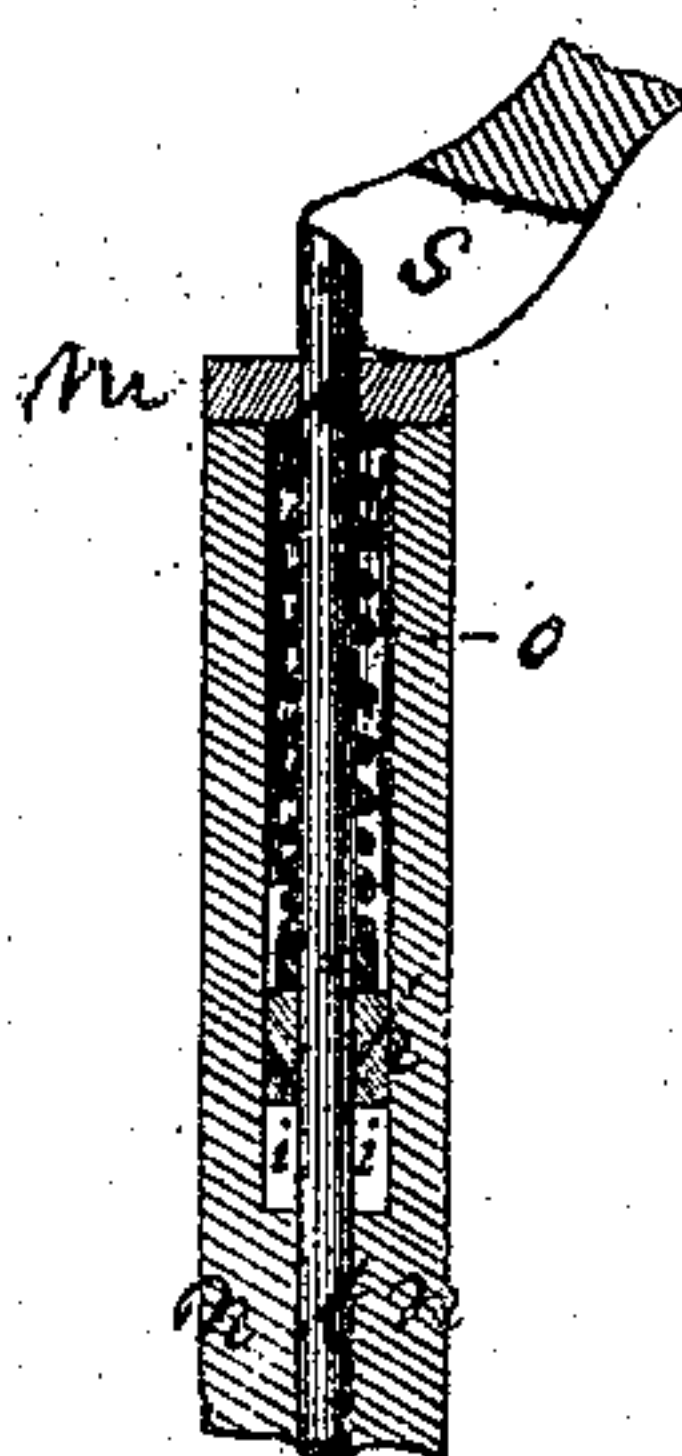


Fig. 3.



Witnesses

W. E. Simmes
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S. WILLIAM BABBITT, OF WEST MERIDEN, CONNECTICUT.

Letters Patent No. 113,242, dated April 4, 1871.

IMPROVEMENT IN FLUTING-MACHINES.

The Schedule referred to in these Letters Patent and making part of the same.

I, S. WILLIAM BABBITT, of West Meriden, in the county of New Haven and State of Connecticut, have invented certain Improvements in Fluting-Machines, of which the following is a specification.

Nature and Objects of the Invention.

My machine is designed for fluting or crimping cloth, and consists of two metal rolls fitting and turning together very much as two gear-wheels turn together. These rolls are removable from their axes and the axes are supported at one end only.

My machine is designed mainly for household use, and is made with a screw-clamp for the purpose of securing it to a table. All fluting-machines use heated rolls, and the heating is usually effected by having one or both the rolls hollow, for the purpose of introducing therein from time to time bars of hot iron.

My improvements consist—

First, in making the rolls detachable from their axes, so that they may themselves be heated.

Second, in having the axes of the rolls supported from one end only, thus leaving the rolls fully open at the other end.

Third, in a novel adjustment for separating the rolls when desired.

Fourth, in attaching a clamp to the machine so that it can be readily fastened to the table.

Description of the Accompanying Drawing.

Figure 1 is a side elevation.

Figure 2 is an end elevation of the end, upon which is the crank.

Figure 3 is a central vertical section of the main upright, showing the construction of my peculiar adjustment for separating the rolls when desired.

General Description.

The letter *a* indicates the metal frame of the machine, and

b, the screw-clamp for securing it to a table.

The letter *c* indicates the shaft of the lower roll, bearing the hand-crank *d*.

The lower roll *e* is fast to its shaft *c*.

The upper roll *f* is loose upon its shaft, and is driven by the lower roll.

Duplicates of the loose upper roll are necessary, so that while one is in use the other is being heated.

As the roll *f* is loose upon its axis it is readily slipped off and replaced by its duplicate when desired; or, if preferred, the roll *f* can be secured upon its shaft by a wire pin, *g*.

The axis *h* of the upper roll is square at one end, just sliding in a slot, *i*, in the upright *a'*, and it is fastened on the rod *k* which runs through it.

This rod *k* slides up and down in the bearing *m* which caps the upright *a'*, and also in the bearing *n* below the slot *i*.

A spiral compression-spring, *o*, bearing against the cap *m* on one side and against the square head of the axis or shaft *h* on the other, forces the upper roll down upon the lower with the necessary force.

The rod *k* is jointed at the top to the cam *s*, which has a handle, *s'*, and when this handle is thrown down into the position shown by the dotted lines in fig. 2, the upper roll will be raised to the position shown by the dotted lines in fig. 2, when the cloth can be introduced between them or the rolls changed, a cold one taken off and a hot one put on.

I do not claim, broadly, rolls supported only at one end, nor the adjustment of a movable roll with relation to a fixed one by means of a cam-lever and other devices; but

I claim as my invention—

A fluting-machine, composed of the hollow removable roll *f* mounted loosely on shaft *h*, having a vertical movement in the slot *i* of the upright *a'*, the rod *k*, spring *o*, and cam-lever *s s'*, the roll *e*, shaft *c*, and crank *d*, and the frame *a a'* provided with the screw-clamp *b*, all constructed, arranged, and operating substantially as herein described.

S. WM. BABBITT.

Witnesses:

W. ED. SIMONDS,
SIDNEY E. CLARK.